

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

Claims 1-9 (Canceled).

10. (New) A method for operating a fuel injection system for an internal combustion engine having at least one bank of at least two cylinders, the fuel injection system having at least two piezoelectric elements, each cylinder having associated with it at least one respective piezoelectric element for injecting fuel into the cylinder by at least one of charging and discharging the respective piezoelectric element by a supply unit associated with the at least two piezoelectric elements, the method comprising:

monitoring for an occurrence of an overlap between a first time interval in which a first piezoelectric element is to be one of charged and discharged, and a second time interval in which a second piezoelectric element is to be one of charged and discharged, wherein the monitoring for the overlap includes monitoring for an occurrence of at least one of charging and discharging of a lower-priority injection within a predefined time interval around a point in time of at least one of charging and discharging of a higher-priority injection during operation of the fuel injection system; and

determining, based on the overlap, a magnitude of at least one of a shift and a shortening of the lower-priority injection with respect to the higher-priority injection.

11. (New) The method as recited in claim 10, wherein injection priorities are predefined, and wherein the predefined injection priorities are maintained for one injection cycle.

12. (New) The method as recited in claim 11, wherein a determination of the overlap is achieved during an interrupt of a triggering circuit during operation of the fuel injection system.

13. (New) The method as recited in claim 12, wherein a determination of the overlap is achieved based on a rotation speed and a crankshaft angle of the internal combustion engine.

14. (New) The method as recited in claim 13, wherein the internal combustion engine has a plurality of banks of cylinders, each bank having at least two cylinders, and wherein the monitoring includes monitoring for an overlap between a first time interval in which a first piezoelectric element associated with a cylinder of a first bank is to be one of charged and discharged, and a second time interval in which a second piezoelectric element associated with a cylinder of a second bank is to be one of charged and discharged.

15. (New) The method as recited in claim 10, wherein a determination of the overlap is achieved during an interrupt of a triggering circuit during operation of the fuel injection system.

16. (New) The method as recited in claim 15, wherein a determination of the overlap is achieved based on a rotation speed and a crankshaft angle of the internal combustion engine.

17. (New) The method as recited in claim 16, wherein the internal combustion engine has a plurality of banks of cylinders, each bank having at least two cylinders, and wherein the monitoring includes monitoring for an overlap between a first time interval in which a first piezoelectric element associated with a cylinder of a first bank is to be one of charged and discharged, and a second time interval in which a second piezoelectric element associated with a cylinder of a second bank is to be one of charged and discharged.

18. (New) A method for operating a fuel injection system for an internal combustion engine having at least one bank of at least two cylinders, the fuel injection system having at least two piezoelectric elements, each cylinder having associated with it at least one respective piezoelectric element for injecting fuel into the cylinder by at least one of charging and discharging the respective piezoelectric element by a supply unit associated with the at least two piezoelectric elements, the method comprising:

monitoring for an occurrence of an overlap between a first time interval in which a first piezoelectric element is to be one of charged and discharged, and a second time interval in which a second piezoelectric element is to be one of charged and discharged, wherein the monitoring for the overlap includes monitoring for an occurrence of a crankshaft

angle range from the beginning of the earliest injection to the end of the latest injection that exceeds a predefined permissible angle range; and

determining, based on the overlap, a magnitude of at least one of a shift and a shortening of a lower-priority injection with respect to a higher-priority injection.

19. (New) The method as recited in claim 18, wherein in an internal combustion engine having a plurality of cylinders in a single-bank structure, the permissible angle range is determined by dividing 720° crankshaft angle by the number of cylinders.

20. (New) The method as defined in claim 18, wherein in an internal combustion engine having a plurality of banks each having a plurality of cylinders, the plurality of banks being supplied from a common supply unit in order to at least one of charge and discharge piezoelectric elements associated with the cylinders of the banks, the permissible angle range is determined by dividing 720° crankshaft angle by a product of the number of cylinders multiplied by the number of banks.

21. (New) The method as defined in claim 19, wherein the crankshaft angle range from the beginning of the earliest injection to the end of the latest injection is determined by a minimum/maximum selection of angle data for the earliest injection and the latest injection.

22. (New) The method as defined in claim 20, wherein the crankshaft angle range from the beginning of the earliest injection to the end of the latest injection is determined by a minimum/maximum selection of angle data for the earliest injection and the latest injection.